AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning at page 1, line 9, as follows:

[0002]   This application is related to commonly-assigned ~~PCT~~ U.S. Application No.
10/520,818, entitled "Heterodyne Optical Spectrum Analyzer," filed on July 8, 2003, and to
commonly-assigned, U.S. patent application serial number 10/005,819, entitled "Apparatus and
Method for the Complete Characterization of Optical Devices Including Loss, Birefringence, and
Dispersion Effects," filed on December 14, 2001, now U.S. Patent No. 6,856,400.

Please amend the heading beginning at page 1, line 19, as follows:

BACKGROUND AND SUMMARY ~~OF THE INVENTION~~

Please amend the paragraph beginning at page 1, line 20, as follows:

[0004]   Mixing between a reference signal and a data signal is often necessary to extract
information about an optical device. A probe signal and a reference signal originating from the
same source are typically mixed, resulting in fringes that can be detected and used to ~~asses~~ assess
information about the device being probed. In interferometric sensing, a reference signal is
mixed with a signal whose phase and/or amplitude is modified by a parameter to be measured.

Please amend the paragraph beginning at page 6, line 20, as follows:

[0019]   Other features, aspects, and advantages ~~of the present invention~~ will become
apparent from the following detailed description, taken in conjunction with the accompanying
drawings, illustrated by way of example ~~the principles of the invention~~. Like reference symbols
refer to like elements throughout.

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Please amend the paragraph beginning at page 7, line 21, as follows:

[0029]   The following description, for purposes of explanation not limitation, sets forth specific details, such as particular components, electronic circuitry, techniques, etc. ~~in order to provide an understanding of the present invention.~~ But it will be apparent to one skilled in the art that the present ~~invention~~ technology may be practiced in other embodiments that depart from these specific details. In other instances, detailed descriptions of well-known methods, devices, and techniques, etc. are omitted so as not to obscure the description with unnecessary detail. Individual function blocks are shown in the figures. Those skilled in the art will appreciate that functions may be implemented using discrete components or multi-function hardware. Processing functions may be implemented using a programmed microprocessor or general-purpose computer, using an application specific integrated circuit (ASIC), and/or using one or more digital signal processors (DSPs).